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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,178	03/03/2004	David E. Francischelli	P-8575.06	4900
27581	7590	12/13/2010		
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924				
EXAMINER				
JOHNSON III, HENRY M				
ART UNIT		PAPER NUMBER		
3769				
NOTIFICATION DATE		DELIVERY MODE		
12/13/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/792,178

Applicant(s)

FRANCISCHELLI ET AL.

Examiner

Henry M. Johnson, III

Art Unit

3769

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 25-33 and 62-79 is/are pending in the application.
- 4a) Of the above claim(s) 62-79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed November 1, 2010 have been fully considered but they are not persuasive. The amendment to claim 25 is related to detecting a vibration prior to boiling of water in the tissue. Nardella teaches the power may be reduced when the steam is above a selected level, thus teaching the vibrations are associated with levels of steam generation (Col. 6, lines 47-50) and are interpreted as including the period before a boiling point as Nardella is concerned with the effects of steam generation and tissue "pops" (background).

Interview

A telephone interview was initiated by the examiner on 11/18/2010 with Rudolph Hofmann to discuss possible claim amendments to place in condition for allowance. No agreement was reached.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-26 and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Nardella (5,733,281). Nardella discloses a method of tissue ablation

comprising positioning an electrode (energy delivering electrode; Col. 4, lines 20-25, positioning is inherent for an ablation operation), supplying electrical power (electrosurgical energy; Col. 6, lines 54-55), sensing with a sensor (acoustical detection element; Col. 2, lines 46-49) the vibration of the tissue and reducing/halting ("regulating", patented claim 3; power regulation element; col. 8:57-60) power when the vibration reaches a given value. Nardella teaches the power may be reduced when the steam is above a selected level, thus teaching the vibrations are associated with levels of steam generation (Col. 6, lines 47-50) and are interpreted as including the period before a boiling point as Nardella is concerned with the effects of steam (background). The acoustic detection element may be a piezoelectric ceramic crystal (Col. 7, line 35) or a microphone (Col 3, line 4). The sensor of Nardella, be it the piezoelectric crystal or the microphone, senses vibration. It has no ability to differentiate between vibrations from multiple sources. Nardella teaches a feedback system that includes an acoustical detection element, e.g., an ultrasonic transducer, coupled to the surgical tool and the pulse regulation element for acoustically detecting the effects of energy on tissue, such as the generation of steam created during the heating process. The acoustical detection element preferably generates an acoustic output signal, and the power regulation element preferably regulates the application of power to the energy-delivering electrode in response to either the derivative output signal or the acoustic output signal. The term "acoustic" is intended to include any vibratory disturbance of any frequency in a selected fluid, such as air, and includes sonic and ultrasonic waves (Col. 2, lines 46-59). Nardella further discloses a power regulation element in circuit with the surgical

tool and the acoustical detection element for regulating the power supplied to the energy-delivering electrode in response to the acoustic output (detected vibration) signal (Col. 3, lines 18-23).

Regarding claims 29 and 30, Nardella discloses an output device (Analyzer, Fig. 2, # 130) and an indicator signal (Fig. 2, # 132, signal to RF generator).

Regarding claim 32, PVDF is a piezoelectric polymer (Col. 7, line 36).

Regarding claim 33, sensor (Fig. 2, # 20) is integrated with the electrode (Fig. 2, # 12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nardella (5,733,281) in view of Nardella (5,334,193). Nardella ('281) incorporates by reference in Col. 9, line 56, Nardella (5,334,193), which discloses impedance feedback control of fluid delivery to treated tissue (see '193 Abstract).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Henry M. Johnson, III at telephone number (571)272-4768.

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit 3769